



Site Development: Landscape and Irrigation Review Median/Right-of-Way

The following checklist should be used as a guide in the preparation for review of landscape/irrigation submittals. Also, refer to Technical Design Manual #8 "Guidelines for Landscaping and Irrigation of Right-of-Ways, Retention Basins, and Parks Development" for complete design requirements. If the applicable items are addressed, review time and corrections required for re-submittal will be reduced.

If you require assistance in completing this checklist, please call _____ at 480-782-_____.

Median landscape and irrigation plans must be reviewed by both the City Landscape Architect and Site Development Plans Examiner.

Note: the applicant information must be completed and the checklist submitted with the improvement plans.

Please return this checklist and redlines with the next plan submittal.

Applicant Information

Project Name:		
Address:		
Name of Firm:		
Contact Person:		Phone No.:

For City Use

Reviewed By:		Date:
Preliminary Review No.:		
Site Plan No.:		
Zoning Case No.:		
Comments:		

Mailing Address:
P.O. Box 4008, MS 105
Chandler, Arizona 85244-4008

**Planning and Development Department
Current Planning Division
Site Development Section
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Form No. UDM-143
Rev: 3-7-07

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Item	Comments
<p><input type="checkbox"/> 1. Show medians on civil plans.</p> <p><input type="checkbox"/> 2. Include location of overhead and underground utilities, streetlights, signage, etc. Contact the appropriate utility for acceptable plant material species and location.</p> <p><input type="checkbox"/> 3. All plant material must be selected from the Arizona Department of Water Resources Low Water Use Plant List. Not all plant materials are appropriate for use within the public right-of-way. Palm trees are prohibited.</p> <p><input type="checkbox"/> 4. No boulders greater than 8" in diameter are allowed in median.</p> <p><input type="checkbox"/> 5. In medians, provide a minimum tree density in landscape areas 8'-15' wide of one (1) tree per 30' of plantable median length. Medians greater than 15' wide will require increased tree densities.</p> <p><input type="checkbox"/> 6. In back-of-curb frontage landscape right-of-way areas up to 20' wide, provide one (1) tree per thirty (30) linear feet. For areas wider than 20', increase the tree density by one (1) tree per eight hundred (800) square feet of increased area.</p> <p><input type="checkbox"/> 7. Maximum spacing between trees is 100'.</p> <p><input type="checkbox"/> 8. Shrubs and groundcover must provide 50% coverage at maturity.</p> <p><input type="checkbox"/> 9. Provide a minimum of two (2) and a maximum of five (5) tree species and a minimum of three (3) and a maximum of twelve (12) shrub/groundcover species per design area.</p> <p><input type="checkbox"/> 10. Include contour lines showing gentle mounds and swales with 4:1 maximum slopes. In medians less than 8' in width, limit grade variations to 6" and less.</p>	

NOTE: The height of the mounds must be considered when determining compliance with the following sight distance requirements. (Standard Detail C-246)

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<p><input type="checkbox"/> 11. Refer to Section C, 2-F, of the “Guidelines for Landscaping and Irrigation of Right-of-Ways, Retention Basins, and Park Development” for requirements for sight distance/visibility clear zones.</p> <ul style="list-style-type: none"> ■ Trees within vehicular sight distance visibility clear zones shall be horizontally spaced and/or offset to prevent creation of a “picket fence” effect. ■ 75% of any moving vehicle profile must be visible at all times from the origin point of sight distance. (30' minimum spacing for single trunk trees on 90' street alignment and 50' for multi-trunk trees.) <p><input type="checkbox"/> 12. Add note on plans:</p> <p style="padding-left: 40px;">All trees within vehicular sight distance/visibility clear zones shall have a vertical canopy clearance/clear trunk to 6' above the nearest curb.</p> <p><input type="checkbox"/> 13. Add note on plans:</p> <p style="padding-left: 40px;">Trees must maintain a minimum 6' setback from the face of curb (in areas effected by future turn lanes, trees may be placed no less than 4' from face of curb.</p> <p><input type="checkbox"/> 14. No tree may be placed within 50' from the end of the median.</p> <p><input type="checkbox"/> 15. Plant materials that have thorns or sharp protrusions must be restricted to areas separated 3' from pedestrian surface or bicycle lanes.</p> <p><input type="checkbox"/> 16. In back of curb frontage landscape right-of-way areas, maintain a minimum 1' setback from curb and walkways to shrubs and groundcover at maturity. For medians, maintain 2' setback from curb.</p> <p><input type="checkbox"/> 17. Place trees to provide an 8' clearance above sidewalk and 13' 6" clearance above vehicular traffic route.</p> <p><input type="checkbox"/> 18. For medians that include additional width for future lanes, show the location of the future curb. Provide an overall median design that will allow for the future removal of the outer edges while maintaining a total design for the permanent portion of the median to remain. Major components of the irrigation system should not be installed in temporary median areas. Place trees within the permanent area.</p>	

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<p><input type="checkbox"/> 19. Add note on plans:</p> <p style="padding-left: 40px;">The landscape will be maintained by the developer or contractor for a period of ninety (90) days following a preliminary inspection and acceptance by the City. If not healthy at the end of the maintenance period, the maintenance shall be continued until the plant material is approved by the City.</p> <p><input type="checkbox"/> 20. Specify 2" minimum depth of decomposed granite of uniform depth after settlement. Granite to be Madison Gold ¾" minus. Note on plans.</p> <p><input type="checkbox"/> 21. Add note on plans:</p> <p style="padding-left: 40px;">Contractor must submit a decomposed granite sample to the City Landscape Architect prior to ordering.</p> <p><input type="checkbox"/> 22. Add note on all plan sheets (note to be in 18 pt BOLD):</p> <p style="padding-left: 40px;">Prior to any landscape or irrigation construction in the public right-of-way, the contractor/developer shall notify the City Landscape Architect at 480-782-3428 at least 48 hours in advance of installation work.</p> <p><input type="checkbox"/> 23. Add note on plans:</p> <p style="padding-left: 40px;">All rock groundcover areas shall be sprayed with pre-emergent herbicide by a licensed applicator as part of installation as follows (a minimum of three (3) applications are required):</p> <ul style="list-style-type: none"> ■ Prior to the application of granite: 1/2 gallon per acre ■ After granite application: 1/2 gallon per acre ■ Prior to final acceptance: 1 gallon per acre <p style="padding-left: 40px;">The City shall be furnished with written documentation of the schedule of application dates.</p> <p><input type="checkbox"/> 24. Specify decorative concrete or concrete pavers in median per Standard Detail C-225. Coordinate type of material required at specific locations with City Landscape Architect. For pavers, specify Citystone II, Old Town Blend color. Specify pavers or concrete extended to point median becomes 6' wide, back of curb to back of curb.</p>	

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<input type="checkbox"/> 25. The irrigation system must be designed with trees on separate valves. ONLY rigid type P.V.C. materials may be used. Specify two (2) multi-port drip emitters per tree. Specify one (1) single-port per plant or one (1) multi-port per six (6) plants for shrubs and groundcover. Maximum length of emitter distribution tubing is 5'. Emitter tubing must be buried 4" below finish grade.	
<input type="checkbox"/> 26. Plastic P.V.C. lines below paving shall be installed within separate schedule 40 sleeves. For P.V.C. lines 1"-2½", the sleeve shall be two (2) nominal sizes larger. For P.V.C. lines 3" and larger, the sleeve shall be one (1) size larger.	
<input type="checkbox"/> 27. Specify all new median construction to utilize "purple" equipment and pipe designed for future reclaimed water use.	
<input type="checkbox"/> 28. Reclaimed Water Notes Include the following notes on landscape/irrigation plans when using effluent water: <p style="text-align: center;">SEE ATTACHED EXHIBIT "A" RECLAIMED WATER NOTES</p>	
<input type="checkbox"/> 29. Type K hard copper shall be used for all mainline piping above grade and extending a minimum of 18" and a maximum of 24" below finish grade.	
<input type="checkbox"/> 30. Place irrigation meter, backflow prevention unit and enclosure, metered service (if applicable) and controller in center of median 6' behind face of curb. Backflow unit to be placed within a Guard Shack enclosure. Provide detail on plans.	
<input type="checkbox"/> 31. The irrigation controller is to be a 1BOC Plus series battery operated clock. Note on plans.	
<input type="checkbox"/> 32. Provide Hunter electric ICV valves with latching solenoids. Note valve type on plans.	
33. Provide a Brass shut off ball valve prior to each electric valve. Note on plans.	
34. Include details on plans per Technical Design Manual #8.	

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<input type="checkbox"/> 35. Include the following note on plans: <u>Inspections</u> The City's individual User Department will inspect and approve the work at the following stages of completion. Any work completed without these inspections must be removed prior to acceptance of that phase of work. These stages are: A. Completion of all trenching and installation of all main lines prior to back filling, including the vacuum breaker, quick couplers, electric valves and any isolation valves. The main line shall be pressure tested for thirty (30) minutes at this inspection. B. Completion of installation of all control wires prior to backfilling. C. Installation of all lateral valves, lines, and heads prior to backfilling.	
<input type="checkbox"/> 36. Include the following note on plans: Prior to any construction or utility work starting within a City right-of-way, which will affect existing City-owned and maintained landscaping or irrigation systems, there will be a meeting on site to show that the existing systems or landscaped areas are in proper repair and functioning. At the completion of the construction work there will be another meeting and inspection on site. The same areas and systems will again be reviewed. Any damage to the landscaping or to the irrigation system will be the responsibility of the general contractor or utility company and must be repaired to the satisfaction of the City within five (5) working days. If this work is not completed within the allotted time, the City will make the repairs or corrections and money will be deducted or billed to the general contractor on the project. The individuals which should be represented at these on-site meetings shall be: a representative from the contractor, a representative from the engineering firm or City responsible for the construction inspection and a representative from the City Street Department.	

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Item	Comments
<input type="checkbox"/> 37. Submit redlines with corrected plans. Include Grading and Drainage, Landscape and Irrigation Plans, and any other information or details needed to demonstrate compliance with codes.	
Also include a narrative explaining method of compliance.	